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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,471	12/18/2000	Pascal Albert Emile Lefebvre	Q62150	9352
7590 07/12/2005				
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213			EXAMINER HAN, CLEMENCE S	
			ART UNIT 2665	PAPER NUMBER
DATE MAILED: 07/12/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,471

Applicant(s)

LEFEBVRE ET AL.

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 1, 2, 4, 6-9, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Anandakumar et al. (US Patent 6,765,904).

Regarding claim 1, Anandakumar teaches a network status reporting method; for reporting in a communications network a network status information (“QoS measure” in Column 24 Line 2) to a data source 311 with an adaptive transmission rate in order to enable said data source to adapt said transmission rate based on said network status information (Column 25 Line 36-40), said communications network further comprising at least one intermediate network node (Column 27 Line 54-55), and a data sink 361’, wherein only said data sink reports to said data source on said network a status information of said communications network in its neighbourhood (Column 23 Line 67 – Column 24 Line 4).

Regarding claim 2, Anandakumar teaches a communications network comprising: at least one data source 311 with an adaptive transmission rate (Column 25 Line 36-40); at least one intermediate node (Column 27 Line 54-55);

and at least one data sink 361', wherein said data source adapts said transmission rate (Column 25 Line 36-40) on the basis of network status information ("QoS measure" in Column 24 Line 2), and wherein only said data sink is able to report said network status information of said communications network in its neighbourhood to said data source (Column 23 Line 67 – Column 24 Line 4).

Regarding claim 4, Anandakumar teaches said data sink is a network termination 361' in an access network of said communications network.

Regarding claim 6, Anandakumar teaches the data source 311 adapted to be used in the communications network (Column 22 Line 57-59).

Regarding claim 7, Anandakumar teaches the data sink 361' adapted to be used in the communications network (Column 25 Line 32-44).

Regarding claim 8, Anandakumar teaches said data-source 311 is adapted to request said data sink 361' to report to said data source on said network status information of said communications network (Column 22 Line 23-26).

Regarding claim 9, Anandakumar teaches said data sink 361' is adapted to regularly report to said data source 311 on said network status information of said communications network (Column 25 Line 32-44).

Regarding claim 15, Anandakumar teaches a network status reporting method, for reporting in a communications network, comprising: a data sink 361'

reporting to a data source 311 a status of a segment of said communications network near said data sink (Column 23 Line 67 – Column 24 Line 4); at least one intermediate network node transmitting said report; and said data source adjusting transmission rate based on said received report (Column 25 Line 36-40), wherein only said data sink reports to said data source on said status of said segment of said communications network near said data sink (Column 23 Line 67 – Column 24 Line 4).

Regarding claim 16, Anandakumar teaches the network status information is information about the status of network segment around the data sink 361' (Column 23 Line 67 – Column 24 Line 4); the network status information comprises a report about at least one of : congestion, radio-frequency interference, and weather condition in the network segment around the data sink (Column 25 Line 4-12), and the report is communicated to the data source (Column 23 Line 67 – Column 24 Line 4).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 3, 5, 10-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anandakumar et al. in view of Liu et al. (US Patent 6,349,096).

Regarding claim 3, Anandakumar teaches a communications network comprising: at least one data source 311 with an adaptive transmission rate (Column 25 Line 36-40); at least one intermediate node (Column 27 Line 54-55); and at least one data sink 361', wherein said data source adapts said transmission rate (Column 25 Line 36-40) on the basis of network status information ("QoS measure" in Column 24 Line 2), and wherein only said data sink is able to report said network status information of said communications network in its neighbourhood to said data source (Column 23 Line 67 – Column 24 Line 4). Anandakumar, however, does not teach said data sink is a line termination in an access network of said communications network. Liu teaches said data sink is a line termination 240 in an access network of said communications network. It would have been obvious to one skilled in the art to modify Anandakumar to use a line termination as the data sink as taught by Liu in order to provide end to end connection control to DSL subscribers (Column 3 Line 57-62).

Regarding claim 5, Liu teaches said network status information is a capacity of a link between a network termination and a line termination in said access network of said communications network (Column 9 Line 51).

Regarding claim 10, Anandakumar teaches a communications system comprising: a data source 311 with an adaptive transmission rate (Column 25 Line

36-40); wherein the data source adapts the transmission rate on the basis of a network status reported by at least one of the line termination element and the network termination element 361' (Column 25 Line 36-40). Anandakumar, however, does not teach a line termination element; a network termination element connected to the line termination element via a first network; and at least one intermediate node connecting the data source to the line termination element via a second network; and wherein the network status is determined based on a quality of signal of the first network only. Liu teaches a line termination element 240; a network termination element 230 connected to the line termination element via a first network 225; and at least one intermediate node connecting the data source 231 to the line termination element 240 via a second network 260; and wherein the network status is determined based on a quality of signal of the first network 225 only (Column 9 Line 51 and step 432). It would have been obvious to one skilled in the art to modify Anandakumar to use a line termination as the data sink as taught by Liu in order to provide end to end connection control to DSL subscribers (Column 3 Line 57-62).

Regarding claim 11, Liu teaches the first network 225 is of a different type than the second network 260, and comprise a heterogeneous network system.

Regarding claim 12, Liu teaches the line termination element 240 and the network termination element 230 negotiate a transmission rate for the first network 225, and wherein one of the line termination element and the network termination element reports the network status only when the transmission rate in the first network is changed (Column 9 Line 51 and step 432).

Regarding claim 13, Liu teaches the network termination element detects an influence of environmental conditions on the transmission rate of the first network and, based on the detected influence, the network termination element 230 and the line termination element 240 re-negotiate the transmission rate (Column 10 Line 21-28).

Regarding claim 14, Liu teaches the first network comprises a digital subscriber line 225 and wherein the second network comprises a frame relay network 260 (Column 1 Line 27), and wherein the network termination element comprises a modem 230 and the line termination element comprises a multiplexer 240.

Regarding claim 17, Liu teaches the line termination 240 is a data sink.

Response to Arguments

5. Applicant's arguments filed on March 29, 2005 have been fully considered but they are not persuasive.

In response to page 8-11, the applicant argues that Anandakumar discloses reporting the network status information of entire network (path between the source and destination) but not the network status information of the communication network in its neighbourhood. The specification, (Page 3 Line 13-15), teaches “network status in its neighborhood may be the quality of signal received by the data sink that may be observed by monitoring loss of frames or bit-error rate at eh data sink”. Anandakumar teaches reporting the quality of signal received by the data sink 361’ by monitoring loss of packets (Column 25 Line 4-12).

In response to page 11-14, the applicant argues that Liu does not disclose the network status reported by at least one of the line termination element and the network termination element. Liu teaches the data source 231, the line termination element 240 (right DSLAM in the Figure 2) and the network termination element 230. For the step 432 in Figure 4C, the data source 231 decides the available rate based on the network status (“Line quality of DSL 225” in Column 9 Line 51). For the data source to be able to determine the available rate based on the network status, the network status must be reported to the data source.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 -


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. H.
Clemence Han
Examiner
Art Unit 2665



STEVEN NGUYEN
PRIMARY EXAMINER